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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,212	09/30/2003	Kang Soo Seo	46500-000531/US	9584

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EXAMINER	
ZHAO, DAQUAN	
ART UNIT	**PAPER NUMBER**
2621	
MAIL DATE	**DELIVERY MODE**
02/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,212	SEO ET AL.	
	Examiner	Art Unit	
	Daquan Zhao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/12/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/27/2007 have been fully considered but they are not persuasive.

2. On pages 9-10, applicant argues "computer readable medium having a data structure for managing reproduction of graphic data" is functional material. However, "impart functionality when employed as a computer component" is also a requirement in the cited passage in page 10 of the remark from MPEP §2106.01. There is no computer component in the claim to permit the functionality to be recognized. Therefore, the rejection under 35 U.S.C. §101 is maintained.

Applicant's amendment changing "at least one palette information segment" to "palette information segments", and the argument about the "palette information segment in pages 11-12 of the remark, necessitated new ground(s) of rejection. This action is made final.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because when nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is

present to satisfy the practical application requirement. The "data structure for managing reproduction of graphic data" recited in claim 1 is considered to be nonfunctional descriptive material. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 2-8 are also affected.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There's no description for "computer readable medium" in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2,3, 8, 9, 10, 11, 12, 13, 16, 17, 20, 21, 24, 25 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Miwa et al (US 5,923,627).

For claim 1, Miwa et al teach a computer readable medium having a data structure for managing reproduction of graphic data, comprising: a graphic information area including at least one graphic image reproduction information segment (e.g. figure 6D, 9A, 9B and column 2, line 66-column 21, line 20, column 33, line 41-57, the highlight information shown figures 9A-9B is considered to be the graphic image reproduction information segment, wherein the Highlight information is in the PCI, which

is in the management information in figures 5A and 6D, and the sub-picture (or sub-title) data as shown in figure 5Ais considered to be the graphic data) and palette information segments (e.g. item information are considered to be the palette information segments), each palette information segment providing color information (e.g. each item information provides color pattern), each graphic image reproduction information segment providing reproduction information for reproducing one or more graphic images (e.g. column 33, lines 40-57, using the item color information to reproduce the sup-picture), wherein each palette information segment has an identifier (e.g. column 20, line 65- column 21, line 20, #1, #2, #3, #4,...#36 of the item information are considered to be the IDs or the position (X, Y) can also be interpreted as IDs); and the reproduction information identifies a palette information segment using the identifier for the palette information segment (e.g. column 20, line 65- column 21, lines 20, the position (X, Y) or the item numbers are used as to identified the color pattern (or palette) that user has chosen for the sub-picture data).

Claim 9 is rejected for the same reasons as discussed in claim 1 above.

Claim 10 is rejected for the same reasons as discussed in claim 1 above, wherein figure 15 of Miwa et al teach an apparatus for reproducing the data structure of an optical disc, and multiple controlling units 83, 93 are shown in figure 15.

Claim 11 is rejected for the same reasons as discussed in claim 1 above, wherein column 4, lines 45-57 teach the corresponding recording method of the data structure shown in figures 2-13.

Claim 12 is rejected for the same reasons as discussed in claim 1 above, wherein column 4, lines 45-57 and column 47, lines 50-60 teach encoding the data structure in the optical disc. There must be a encoder and controller for recording the video.

For claim 2, Miwa et al teach the reproduction information identifies a palette information segment to use in reproducing one or more graphic images (e.g. column 33, lines 41-57).

For claim 3, Miwa et al teach two or more graphic image reproduction information segments include reproduction information that identify a same palette information segment (e.g. figure 9B, each item information contains plurality color pattern, or user can choose the same color pattern for different sub-pictures).

For claims 13, 17, 21, and 25, Miwe et al teach the reproduction information identifies a palette information segment to use in reproducing one or more graphic images (e.g. column 33, lines 41-57) and two or more graphic image reproduction information segments include reproduction information that identify a same palette information segment (e.g. figure 9B, each item information contains plurality color pattern, or user can choose the same color pattern for different sub-pictures).

For claims 8, 16, 20, 24, and 28, Miwa et al teach two or more graphic image reproduction information segments share a same palette information segment (e.g. user can choose the same color pattern for different sub-pictures).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5, 6, 14, 18, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miwa et al (US 5,923,627) as applied to claims 1, 2,3, 8, 9, 10, 11, 12, 13, 16, 17, 20, 21, 24, 25 and 28 above, and further in view of Fujimoto (US 5,912,710).

See the teaching of Miwa et al above.

For claims 5, 6, 14, 18, 22, and 26, Miwa et al fail to teach the blending ratio. Fujimoto teaches the blending ratio (e.g. column 6, lines 15-39). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujimoto into the teaching of Miwa et al to improve the quality of the display picture (Fujimoto, column 3, lines 7-12).

4. Claims 7, 15, 19, 23, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable Miwa et al (US 5,923,627) as applied to claims 1, 2,3, 8, 9, 10, 11, 12, 13, 16, 17, 20, 21, 24, 25 and 28 above and further in view of Official Notice.

See the teaching of Miwa et al above.

For claims 7, 15, 19, 23, and 27, Miwa et al fail to teach the BD-ROM. The examiner takes official notice for the BD-ROM since it is well known in the art. It would

have been obvious for one ordinary skill in the art at the time the invention was made to have utilized the BD-ROM to increase the storage capacity.

Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

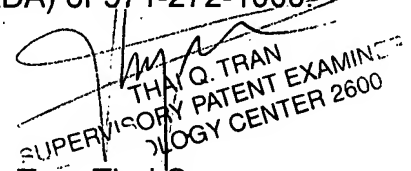
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing data of this action. In the event a first reply is filed within TWO MONTHS of the mailing data of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the data the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing data of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the data of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao



Tran Thai Q
Supervisory Patent Examiner